

# VEHICLE CONTROL APPARATUS

## ABSTRACT OF THE DISCLOSURE

A vehicle apparatus is provided to enable a clutch to be re-engaged without  
5 creating a shock when there is rollback of the wheels, which are driven by an electric  
motor via the clutch. The vehicle apparatus comprises a travel direction command  
determining section, a travel direction command determining section and a wheel  
rotational direction determining section. The travel direction command determining  
section is configured to determine whether a forward travel command or a reverse travel  
10 command has been issued. The travel direction command determining section is  
configured to detect a counterelectromotive force of an electric motor that drives a wheel  
of a vehicle. The wheel rotational direction determining section is configured to  
determine whether the wheel is rotating in an opposite direction to a vehicle travel  
direction command determined by the travel direction command determining section,  
15 based on a determination that a polarity of the counterelectromotive force detected by the  
electric motor counterelectromotive force detecting section does not match the vehicle  
travel direction command determined by the travel direction command determining  
section.